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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,444	08/28/2003	Hiroko Mano	RCOH-1065	6735

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EXAMINER
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TIMBLIN, ROBERT M

ART UNIT	PAPER NUMBER
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2167

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05/12/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/650,444	<b>Applicant(s)</b> MANO ET AL.	
	<b>Examiner</b> ROBERT TIMBLIN	<b>Art Unit</b> 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 15-18,37-40 and 59-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-18,37-40 and 59-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This office action is in response to application 10/650,444 filed 8/28/2003.

#### ***Response to Amendment***

Applicant herein amends claims 15, 18, 37, 40, 59, and 62. In light of the amendments filed 2/6/2008, the previous claim objections for minor informalities and 35 U.S.C. 112 second paragraph rejections have been obviated and therefore are withdrawn. Claims 15-18, 37-40, and 59-62 are pending.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 15-18, 37-40, and 59-62 are rejected under 35 U.S.C. 102(e) as being taught by over Dehlinger et al. ('Dehlinger' hereinafter) (U.S. Patent Application 2004/0006558 A1). In the following, Dehlinger teaches:

With respect to claim 15, Dehlinger teaches A method of processing text data according to claim 1 further comprising additional the steps of:

inputting word candidates (0014; i.e. input text and figure 9, drawing reference 126) for search words (0021, i.e. descriptive search terms and figure 9);

determining a first text database occurrence value (0162, figure 9, 132) of the word candidates (0014; i.e. input text and figure 9, drawing reference 126) in a first text database (figure 9, i.e. library I);

determining a second text database occurrence value (figure 9, 134) of the word candidates in a second text database (0162, figure 9, i.e. other libraries I), the first text database containing certain vocabulary and sentences written in a certain style that are substantially different from those in the second text database (0074; i.e. Dehlinger teaches searching libraries of differing styles (i.e. libraries (i)-(iii));

determining a database occurrence value (figure 9, 136) based upon the first text database occurrence value (0162, figure 9, 132) and the second text database occurrence value (figure 9, 134) in a predetermined manner so that the word candidates (0014; i.e. input text and figure 9, drawing reference 126) substantially more occurring one of the first text database and the second text database but substantially less occurring in the other of the first text database and the second text database are avoided in the search words (0163; i.e. each word in the descriptive word database is associated with a selectivity value corresponding to the highest selectivity value among the N libraries);

selecting the search words from the word candidates (0014; i.e. input text and figure 9, drawing reference 126) based upon in part the database occurrence value (0009; i.e. selecting a word based on an above-threshold selectivity value); and

extracting sentences from the other one of the first text database (figure 9, library I) and the second text (figure 9, Libraries I) database based upon the selected search words (0095, 0157; i.e. extracting content from natural language texts).

With respect to claim 16 and similar claims 17, 38, 39, 60, and 61, Dehlinger teaches (0010) the method of processing text data according to claim 15 wherein the database occurrence value is determined by a following equation:

the database occurrence value = (the second text database occurrence value / a total number of sentences in the second text database) - (the first text database occurrence value / a total number of sentences in the first text database).

That is, Dehlinger teaches finding the frequency of each word in a library to describe the above formula.

With respect to claim 18 and similar claims 40 and 62, Dehlinger teaches (0009) the method of processing text data according to claim 15 further comprising an additional step of determining a search word significance value based upon a following equation:

the search word significance value =

the corresponding predetermined word weight X the database occurrence value,

wherein the corresponding predetermined word weight is  $\log$  (a total number of sentences/ a number of occurrences of the word candidate in an entire portion of the predetermined text database).

That is, Dehlinger describes the above formula with respect to comparing a selectivity value to a threshold to determine the descriptiveness (i.e. significance) of a search term.

With respect to claim 37, A storage medium containing a computer program for processing text data performing the additional tasks of:

inputting word candidates (0014; i.e. input text and figure 9, drawing reference 126) for search words (0021, i.e. descriptive search terms and figure 9);

determining a first text database occurrence value (0162, figure 9, 132) of the word candidates (0014; i.e. input text and figure 9, drawing reference 126) in a first text database (figure 9, i.e. library I);

determining a second text database occurrence value (figure 9, 134) of the word candidates in a second text database (0162, figure 9, i.e. other libraries I), the first text database containing certain vocabulary and sentences written in a certain style that are substantially different from those in the second text database (0074; i.e. Dehlinger teaches searching libraries of differing styles (i.e. libraries (i)-(iii));

determining a database occurrence value (figure 9, 136) based upon the first text database occurrence value (0162, figure 9, 132) and the second text database occurrence value (figure 9, 134) in a predetermined manner so that the word candidates (0014; i.e. input text and figure 9, drawing reference 126) substantially more occurring one of the first text database and the second text database but substantially less occurring in the other of the first text database and the second text database are avoided in the search words (0163; i.e. each word in the descriptive word

database is associated with a selectivity value corresponding to the highest selectivity value among the N libraries);

selecting the search words from the word candidates (0014; i.e. input text and figure 9, drawing reference 126) based upon in part the database occurrence value (0009; i.e. selecting a word based on an above-threshold selectivity value); and

extracting sentences from the other one of the first text database (figure 9, library I) and the second text (figure 9, Libraries I) database based upon the selected search words (0095, 0157; i.e. extracting content from natural language texts).

With respect to claim 59, An apparatus for processing text data comprising:

an input unit (0070; input device) for inputting word candidates (0014; i.e. input text and figure 9, drawing reference 126) for search words (0021, i.e. descriptive search terms and figure 9);

a database occurrence determination unit (figure 9, module D) connected to said input unit (0070; input device) determining a first text database occurrence value (0162, figure 9, 132) of the word candidates (0014; i.e. input text and figure 9, drawing reference 126) in a first text database (figure 9, i.e. library I) and a second text database occurrence value (figure 9, 134) of the word candidates in a second text database (0162, figure 9, i.e. other libraries I), the first text database containing certain vocabulary and sentences written in a certain style that are substantially different from those in the second text database (0074; i.e. Dehlinger teaches searching libraries of differing styles (i.e. libraries (i)-(iii)), said database occurrence determination unit further (figure 9, module D) determining a database occurrence value (figure

9, 136) based upon the first text database occurrence value (0162, figure 9, 132) and the second text database occurrence value (figure 9, 134) in a predetermined manner so that the word candidates (0014; i.e. input text and figure 9, drawing reference 126) substantially more occurring one of the first text database but substantially less occurring in the other of the first text database and the second text database are avoided in the search words (0163; i.e. each word in the descriptive word database is associated with a selectivity value corresponding to the highest selectivity value among the N libraries);

a search word selection unit (figure 10, Module E) connected to said database occurrence determination unit (figure 9, module D) for selecting the search words from the word candidates (0014; i.e. input text and figure 9, drawing reference 126) based upon in part the database occurrence value (0009; i.e. selecting a word based on an above-threshold selectivity value); and

a text selection unit (0083; i.e. identifying SIDs (sentence identifiers) connected to said search word selection unit for extracting sentences from the other one of the first text database (figure 9, library I) and the second text (figure 9, Libraries I) database based upon the selected search words (0095, 0157; i.e. extracting content from natural language texts).

### ***Response to Arguments***

Applicant's arguments in the reply filed 2/6/2008 have been fully considered but they are not persuasive.

Applicant argues on pages 9-11 of the reply that the Dehlinger reference fails to teach certain patentable feature of the current invention. Specifically, it is argued that Dehlinger does

not teach avoiding “the word candidates substantially more occurring in one of the first text database and the second text database but substantially less occurring in the other one of the first text database and the second text database.” The Examiner respectfully disagrees given the following:

Specifically, Dehlinger teaches forming a database of descriptive words that is generated from input text (i.e. figure 9). The descriptive words are given a selectivity value which is based upon their occurrence in each library. That is, Dehlinger teaches a selectivity value corresponding to the highest selectivity value among the N libraries. It is respectfully submitted that the word with the highest selectivity value (among the libraries) would be chosen for a search.

Further explained, Dehlinger teaches that the occurrence of a word in a plurality of libraries determines its selectivity value (e.g. see 0162, Dehlinger). In other words, if a word is frequently found in library I as well as in the other libraries, the selectivity value for the word would likely be high (in 0162, Dehlinger gives such an example for a particular word having a selectivity value of 4.16 as it occurs frequently in libraries). Further, in 0163 of Dehlinger, it is taught that a database of non-generic words 36 (described in 0014 as a database of processed words that may be converted to descriptive words that are selected for searching and therefore may be “candidate” words for searching) are given a selectivity value corresponding to the highest selectivity value among the N libraries. Those words having an above-threshold selectivity value are then placed in a database of descriptive words 30 that may be used for searching (e.g. see Dehlinger, 0091 wherein the descriptive words are deemed appropriate in use

for a search). With this, the Examiner submits that Dehlinger uses the words with the highest selectivity value (i.e. the words that occur most frequently in the N libraries) for a search.

In selecting the words having the highest selectivity value for a search, the Examiner submits that Dehlinger essentially describes the avoidance of word candidates substantially more occurring in one of the first and second text database but substantially less occurring in the other one of the first and second text database. That is, Dehlinger essentially describes a filtering process which inherently avoids the inclusion of words with low selectivity values (i.e. occurrences in the N libraries) that indicate whether the words candidates (e.g. non-generic words) may occur more in one database than another. For example, such a word candidate more occurring in one database but less in another database would give that word a low selectivity value that would not clear a threshold to be included as a descriptive word for searching. On the other hand, a word occurring most frequently in one database as well as another database (i.e. substantially the same occurrence in both databases) would be selected as a descriptive word for searching. Further, Dehlinger is concerned with discarding spurious words (0175, Dehlinger) to suggest that words substantially occurring more in one database but not another are avoided as search words.

The Applicant also argues (see pages 11-12 of the reply) that the Examiner may refer to the fact that Dehlinger discloses multi-tier search strategies, which are not disclosed in the parent provisional application (60/394,204) for suggesting the above feature of the current invention. However, the Examiner respectfully submits that the multi-tier search strategies are not relied upon or teach the above features and therefore the Dehlinger reference still applies. The

Examiner submits that in the process of creating a database of descriptive words 30, that an inherent filtering process avoids the inclusion of words (described above) that are below a selectivity threshold as search words.

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Timblin whose telephone number is 571-272-5627. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ROBERT TIMBLIN/  
Examiner, Art Unit 2167

/John R. Cottingham/

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Supervisory Patent Examiner, Art Unit 2167